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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,013

Applicant(s)

BECKMANN, FRIEDHELM

Examiner

Norca L. Torres-Velazquez

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“Fiber-type” is considered indefinite because the addition of the word “type” to an otherwise definite expression extends the scope of the expression so as to render it indefinite. *Ex parte Copenhagen*, 109 USPQ 118 (Bd. App. 1955).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 9-13, 15-16, 18, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by TRASK et al. (US 4780359).

TRASK et al. discloses a nonwoven textile panel for use as a fire retardant and sound deadening barrier in the interiors of aircraft. (Abstract) One embodiment of the fire retardant structural textile panel of their invention comprises a core of a first and at least a second fiber that has been processed into a nonwoven, fibrous batt having a top side and a bottom side. (Column 4, lines 31-35) The reference further discloses a core material 14 which is preferably a blend of 2 or more staple fibers that have been chosen so as to have temperature softening points of sufficient disparity such that when

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heated to the temperature softening point of one fiber type, the other fiber types will not be affected. Alternatively, one or more of the fiber types in the core may be non-melting within these temperature ranges, for example fibers of a glass or carbon fibers. (Column 4, lines 56-66) In general, the fibers chosen to form the core shall be fibers which exhibit inherent fire retardancy and low smoke generation and offgassing at elevated temperatures. (Column 7, lines 25-28) TRASK et al. further teach the use of a woven or knitted glass fabric as a bottom side outer surface 19 to the exposed surface of face 17 to serve as a flame barrier to retard flame advancement through the panel. (Column 8, lines 14-17). The TRASK et al. reference also teaches the use of aramid fibers since these, upon burning, produce a thick char which acts as thermal barrier that prevents serious burns to skin. (Column 2, lines 24-26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 4-8, 14, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over TRASK et al. as applied to claims 1, 3, 9-13, 15-16, 18, 20-22 above, and further in view of MURCH (US 3934066).

However, TRASK et al. does not disclose a further reactivateable material that is foamable at a further given temperature different from the temperature of the reactivateable material of the covering layer. Also the TRASK et al. reference fails to particularly disclose that the fibers are coated or sprayed by the reactivateable material.

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MURCH (US 3934066) discloses a fire-retardant, intumescent laminate system and teaches the use of vapor transmission barrier layer such as aluminum foil and/or a thermal barrier layer such as glass wool or cardboard adjacent to the intumescent layer. (Column 2, lines 25-30)

MURCH teaches that the characteristic feature of all intumescent coatings is that the intumescent composition, upon exposure to heat or flame, swells or puffs up to a relatively thick cellular foam char which possesses heat-insulative and fire-retardant properties. (Column 1, lines 13-20)

Regarding claims 14 and 17, *the reference discloses that intumescent coatings have been applied as films, i.e., paints or mastic coatings, directly to the surface to be protected in liquid form by brushing, rolling or spraying.* (Column 1, lines 31-34) The reference teaches that the intumescent layer can comprise a porous sheet material which is impregnated with an intumescent composition; and that the porous sheets may be cellulosic or protein materials, synthetic organic polymeric foams and porous films or inorganic porous materials. (Column 3, lines 48-59). MURCH further discloses that the porous sheet material may be in a woven, non-woven or mixed structure. *The thickness of each individual porous sheet to be impregnated with the intumescent compositions depends on the absorbency capacity of the porous material.* (Column 4, lines 4-15) *Further, MURCH teaches that more efficient intumescent properties can be attained by the addition of blowing agents that decompose at the appropriate temperature.* (Column 6, lines 8-10)

Since both TRASK et al. and MURCH are from the same field of endeavor, the purpose disclosed by MURCH would have been recognized in the pertinent art of TRASK et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the fire retardant structural textile disclosed by TRASK et al. and provide it with blowing agents that decompose at the appropriate temperature for the purpose of protecting

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combustible and also heat-sensitive substrates upon exposure to heat or flame as disclosed by MURCH (Column 1, lines 13-20).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

~~CAMPBELL et al. (US 5527598).~~

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 7:30-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1495.

nlt
October 18, 2001



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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